

## REMARKS

### A. Introduction

Claims 50-60 and 77-79 were pending in the application at the time of the Office Action. Claims 1-49 and 61-76 were cancelled in previous papers. The Office Action rejected claims 50-60 and 77-79 as being obvious over cited art. By this response applicant has amended claims 50 and 77-79, and added new claims 80-85 to further clarify the claimed invention. Support for the amendments to the pending claims and the new claims can be found at least at Figures 1 and 4 and the corresponding discussion in the specification. As such, Applicant submits that the amendments to the claims do not introduce new matter and entry thereof is respectfully requested. Claims 50-60 and 77-85 are presented for the Examiner's consideration in light of the following remarks

### B. Examiner Interview

Applicant would like to thank the Examiner for the courtesy of the telephone interview conducted on October 4, 2007. U.S. Patent Application Publication No. 2002/0195619 to Makimoto et al. ("*Makimoto*") was discussed and contrasted with pending independent claim 50. The Examiner agreed that *Makimoto* does not teach or suggest an indium-containing p-type nitride semiconductor layer formed directly on top of the p-type base layer with the base electrode being formed over the indium-containing p-type nitride semiconductor layer. The Examiner suggested amending claim 50 to clarify this.

### C. Rejection on the Merits

Pages 2-7 of the Office Action reject claims 50-60 and 77-79 under 35 USC § 103(a) as being obvious over *Makimoto*. As discussed in the Examiner Interview, Applicant has herein amended

independent claim 50 to recite, among other things “an indium-containing p-type nitride semiconductor layer **formed directly on said p-type base layer so as to contact a top surface of said p-type base layer**, ... and a base electrode formed over said indium-containing p-type nitride semiconductor layer.” As generally agreed to by the Examiner during the telephone conference, Applicant respectfully submits that because *Makimoto* discloses only an n-type emitter 107 and a base electrode 109 being formed directly on the p-type base layer 106, *Makimoto* does not disclose or suggest the aforementioned limitations of claim 50. Accordingly, Applicant submits that claim 50 is allowable over the cited art. Claims 51-60 and 77-79 depend from claim 1 and thus incorporate the limitations thereof. As such, Applicant further submits that claims 3 and 5-8 are also in condition for allowance.

No other objections or rejections are set forth in the Office Action.

D. New Claims

Applicant submits that each of new claims 80-85 is distinguished over the cited art of record. For example, independent claim 81 recites “a p-type base layer ... having an etched top surface; ... an indium-containing p-type nitride semiconductor layer **formed directly on the etched top surface of the p-type base layer**; and a base electrode formed over said indium-containing p-type nitride semiconductor layer.” As discussed above with regard to claim 50, *Makimoto* does not teach or suggest these limitations. Furthermore, claims 80 and 82-85 each depend from one of independent claims 50 and 81 and thus incorporate the limitations thereof. In view of the foregoing, Applicant submits that claims 80-85 are distinguished over the cited art for at least the same reasons discussed above regarding claim 50.

E. Conclusion

Applicant notes that this response does not discuss every reason why the claims of the present application are distinguished over the cited art. Most notably, applicant submits that many if not all of the dependent claims are independently distinguishable over the cited art. Applicant has merely submitted those arguments which it considers sufficient to clearly distinguish the claims over the cited art.

In view of the foregoing, applicant respectfully requests the Examiner's reconsideration and allowance of claims 50-60 and 77-85 as amended and presented herein.

In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Dated this 9th day of October 2007.

Respectfully submitted,

/Scott A. Woodbury/ Reg. #55743

SCOTT A. WOODBURY

Registration No. 55,743

DANA L. TANGREN

Registration No. 37,246

Attorneys for Applicant

Customer No. 022913

Telephone No. 801.533.9800

SAW:cad

W:\14321\63\SW0000000350V001.DOC